

## **DETAILED ACTION**

### ***Examiner's Amendment***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- Claim 1 has been amended to add, "and the copolymer contains anionic monomers in a ratio of 30 mol% to 90 mol% to the cationic monomer" after the word "(meth)acrylamide)".
- Claim 14 has been canceled.

### ***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

Applicants' arguments regarding the teachings of Sulc et al. as they relate to claim 6 and its dependant claims are persuasive. Although the examples of Sulc et al. clearly demonstrate that deviation from the taught molar charge balance between the charged monomers is contemplated within their invention, this deviation is exemplified as just under 10%. In addition, if one of ordinary skill in the art were to manipulate this ratio of monomers via routine experimentation the more desirable ratio would move closer to one, based upon the desire for dirt repellency and charge balance as taught by Sulc et al. The teachings of Sulc et al. would not suggest charged monomer molar

ratios that have a larger deviation from one because that would increase the likelihood of dirt adhesion, which is in contrast to the desired functionality.

Applicants' arguments regarding the rejection of claim 1 and its dependant claims based upon Uno et al. in view of Aiache et al., Nishihara et al., Yasuda et al., Janda et al., and Ohmura are not persuasive. However, in light of the amendment to claim 1, this collection of references no longer renders the claims obvious. While Uno et al. does provide a teaching of a molar ratio of quaternary ammonium salt (cationic) monomer to anionic monomer of 0.8 to 1.2, they also teach that the weight parts of each of these monomers is 1 to 30. Working examples of the invention provided by Uno et al. are consistent with the teachings of the weight parts of these two monomers but are inconsistent concerning the molar ratio. The majority of the examples have a molar ratio that falls outside of the suggested range and those that fall within the range have a larger proportion of anionic monomer, which is not in accordance with the claim recitation. Because of this inconsistency in teachings, it is not clear that one of ordinary skill in the art would be motivated to prepare the composition of Uno et al. with the quaternary ammonium salt (cationic) monomer in a larger molar quantity than the anionic monomer. For this reason, claim 1 in its amended form is non-obvious over Uno et al. in view of Aiache et al., Nishihara et al., Yasuda et al., Janda et al., and Ohmura.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARALYNNE HELM whose telephone number is (571)270-3506. The examiner can normally be reached on Monday through Friday 9-5 (EDT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on 571-272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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